

Universal Remote Control (URC)
Operating Instructions

SPECIFICATIONS

Operating System : Pre-programmed infra-red remote control system with learning capability

Compatibility : Replaces most brands of infra-red remote controls for TVs, satellite receivers and set-top boxes.

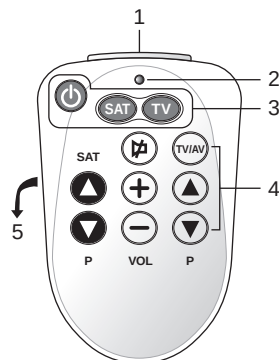
Power Requirement : 2 AAA size batteries

Dimensions : 11.75cm (L) x 7.7cm (W) x 2.3cm (H)

Weight Without Batteries : 80g (Approx.)

MAIN FEATURES

1. Infra-red Transmitter
2. Status Indicator
3. TV Power / SAT Power / MACRO Power
4. Function Keys
5. Battery Compartment



FUNCTION KEYS

KEY SYMBOL	DESCRIPTION
	MACRO POWER ON/OFF
	TV POWER ON/OFF
	SAT POWER ON/OFF
	TV MUTE
	TV / AV SELECTION
	SAT PROGRAMME +/-
	TV VOLUME +/-
	TV PROGRAMME +/-

English

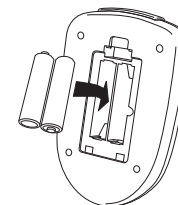
Congratulations! This Universal Remote Control (URC) is a state-of-the-art device specially designed to operate the major functions of your televisions (TV), satellite receivers (SAT) and DVB-T boxes (DVB-T).

This URC is pre-programmed at the factory. Simply enter the correct device codes or search the correct pre-installed code from library, the URC is ready to use. It is compatible to most popular brand TV and SAT. A device code list is included in this user's manual.

1 HOWTO INSTALL BATTERIES

This URC requires 2 fresh AAA size batteries.
(Alkaline batteries are recommended)

1. Remove the battery cover on the back of the URC.
2. Observe the polarity of the batteries and the "+/-" marks inside the battery compartment.
3. Insert the batteries.
4. Push the battery cover back in place.



2 HOWTO SET UP THE URC (Universal Remote Control)

There are two possible ways to set up the URC, either by entering the correct device code or by using the Automatic code search.

Set up by entering Device Code

Refer to the DEVICE CODE LIST, look up the 6-digit Device Code which corresponds to the brand of TV, SAT and DVB-T. Often there will be more than one Device Code listed for your brand, try the first code listed first following the instructions below.

To key in the Device Code listed using the "▼P", "▲P", "⊖VOL" and "⊕VOL" keys refer to the "Magic conversion table" below.

▼P (TV Programme -)	▲P (TV Programme +)	⊖VOL (TV Volume -)	⊕VOL (TV Volume +)
0	1	2	3

For example : TV

Look up the brand name of the device you want to operate in the code list. (e.g. TV)

Aim your remote at the device. Press and hold down "▲P" and "⊖VOL" simultaneously until the indicator lights up.

Enter the 6-digit code within 10 seconds. The indicator should turn off immediately.

[For example: to enter the code for a Philips TV (code 033331), press "▼P", "⊕VOL", "⊕VOL", "⊕VOL", "⊕VOL" and "▲P".]

Now switch on your device manually and check that it responds correctly to all the keys on the URC. If it does, you have selected the correct Device Code. If it does not, repeat the above set up instruction entering the next code listed for your brand until your Device does respond correctly to the URC.

Simply repeat the above procedures to enter the Device Codes for your satellite receiver (SAT) or DVB-T boxes (DVB-T). (Remember to press a correct Device Mode Key in step 1 above.)

English

Note:

- If the LED flashes six times, the code was not recognised. Please go back to step 1 and repeat the procedure, using the next 6-digit code in the list.
- If no key is pressed within 10 seconds, you have to start again at step 1.
- If no correct code is in the list, try using "Automatic Code Search".

Set up by Automatic Code Search

If you cannot identify a correct Device Code for your TV or satellite receiver from the Device Code List, you may try our Automatic Code Search method:

1. Be sure your device is switched on.
2. Aim your remote at the device. Press and hold down "▲P" and "⊖VOL" simultaneously until the indicator lights up.
3. Enter a corresponding Magic Search Code from the following table. The indicator should go out immediately.

DEVICE TYPE:	TV	SAT
MAGIC SEARCH CODE:	000001	000003

(e.g. Press TV device mode key, then press "▲P" and "⊖VOL", and enter TV Search Code 000001.)

4. Press and hold down "▲P" and "⊖VOL" until the indicator lights up.
5. Press **TV** key repeatedly and patiently. Once the correct code is found, the device switches off automatically.
6. Press and hold down "⏻" key to lock in code and the indicator should go out.

Note:

- Each time you press **TV** or **SAT**, the URC will skip to the next code and send out a POWER signal trying to turn off your device.
- If the indicator flashes 6 times after you pressed of **TV** key, you are already at the last code of the library. The search mode will then exit automatically.
- "**TV**", "**SAT**", "⏻", "▼P" and "⏻" can still be functioned if the remote control is in search mode.

3 LEARNING

By Learning Commands

Your URC is factory pre-programmed to operate your TVs, SATs and DVB-T boxes. Due to the limited number of keys, some minor functions may not be included. You may teach your URC with the original A/V remote to operate any excluded function by your choice.

1. Press and hold down "**SAT**", "⊕VOL", and "(TV/AV)" key for 2 seconds until the indicator lights up.
2. Aim your A/V remote control to the URC Infra-red lens on a flat surface, with 4-8 cm apart. Make sure your A/V remote control is with fresh batteries.
3. Press and release a desired key on the URC you want to hold the command. If no key is pressed for more than 10 seconds, the indicator will flash six times then turn off.
4. Press and hold the corresponding key on your A/V remote control to transfer the command. The indicator will flash once and keep on, the command has been learnt successfully, you can release the key on the A/V remote control. If the indicator flashes 6 times, it shows error in learning process. Adjust the position of both remote controls and repeat steps 3 to 4 again.

English

5. Repeat step 3-4 to transfer other signals into next function key. When you finish the whole device mode, press "⏻" key to store your setting. The indicator will flash six times then turn off.

Note:

- If the indicator flashes 6 times after you pressing of **TV** key, you are already at the last code of the library. The search mode will then exit automatically.
- Do not attempt to learn additional commands with the "⏻" key as it will not hold commands by itself.
- Please be noted that learning function will not be performed if the URC is low on battery.
- Each function key will hold one command only. Learning a new command will automatically replace the previous one.

Advance Learning – Teaching a Dual Signal

If you found a learned command work for your A/V equipment only occasionally, your original remote control may contain dual signals.

Try the following steps to reprogram this command:–

1. Follow step 1 and 2 of section "By Learning Commands".
2. Press and release a desired key on the URC you want to hold the command. Now, the indicator will flash once and then keep on.
3. Press and hold the corresponding key on your A/V remote control to transfer the command. The indicator will flash once and keep on.
4. The first signal has been transferred successfully and you can release the key on the A/V remote control.
5. Press the same button on the URC again. The indicator will flash once and then keep on. The dual signal command has been transferred successfully.
6. Repeat step 2 to 4 of this procedure to transfer other signals if there is any.
7. When finished, press "⏻" to store your setting. The indicator will turn off.

WARNING:

Entering a new pre-programmed Device Code will automatically erase and replace all learnt commands in the chosen device mode.

4 MACRO POWER

Macro Power allows you to turn two of your A/V equipment on/off simultaneously. To initiate this function, press "⏻" on/off after the URC setup.

5 OPERATING THE URC

Once you have set up your URC, it should work like your original TV or SAT/DVB-T remote control.

To operate, just aim the URC at your device and press the appropriate key for whatever function you wish. (i.e. "▼P", "▲P", "⊖VOL", "⊕VOL")

Important note for turning on your TV:

There are some TVs which only can be turned on by pressing a direct channel key. Since your URC does not have direct channel buttons, you need to press "▲P" to turn on your TV and press **TV** to switch off.

6 MAINTENANCE

- Do not expose your URC to dust, strong sunlight, humidity, high temperature or mechanical shock.
- Do not use old and new batteries together as old batteries tend to leak.
- Do not use corrosive or abrasive cleaners on the URC.
- Keep the unit dust free by wiping it with a soft, dry cloth.
- Do not disassemble your URC, it contains no user-serviceable parts.

7 TROUBLESHOOTING

Q. My URC does not work at all!

- A. Check your device, if the device is switched off (not on stand-by), the URC will not operate your device.
- A. Check that the batteries are in good condition, inserted properly and are in the correct +/- directions. See **1 HOW TO INSTALL BATTERIES**.

A. Turning on your TV:

There are some TVs which only can be turned on by pressing a direct channel key. Since your URC does not have direct channel buttons, you need to press "▲P" to turn on your TV and press **TV** to switch off.

Q. If several Device Codes listed under the brand of the device, how can I select the correct Device Code?

- A. To select the correct Device Code, test the listed codes one by one until all the keys function correctly.

Q. I found my URC cannot work with my device after I replaced the new batteries.

- A. You should go through the set up procedure again.

DEVICE CODE

TV Brands

Mode Code

ACCENT	001321	033331	101131
ACCUPHASE	101131		
ACEC	101021		
ACTION	000111	001321	032331
ADCOM	100331		
ADMIRAL	000111	001321	010201
	012021	013011	021311
	100011		
ADYSON	000111	032331	
AEA	033331	101131	
AGEF	100011		
AIKO	001321	033331	101031
	101131		
AIM	033331	101131	
AKAI	000111	001321	010031
	010221	011111	011131
	012031	012101	021111
	032311	032331	033331
	101031	101131	
	033331	101131	
AKIBA	033331	101131	
AKITO	000111	001321	011201
AKURA	011211	033331	101131
ALBA	000111	001321	021311
	022201	033321	033331
	101131		
ALBIRAL	022211		
ALFA	000111		
ALLORGAN	023321		
ALLSTAR	000111	033331	101131
AMSTRAD	001321	012021	023021
	032321	033331	101131
	033331	101131	
ANAM	033331	101131	
ANAM NATIONAL	033331	101131	
ANGLO	001321		
ANITECH	000111	001321	012331
	032331	033331	100021
	101131		
ANSONIC	001321	033331	100021
	100131	101021	101131
AOC	000111	032331	
AR SYSTEM	022321	033331	101131
ARC EN CIEL	030131	032221	100031
	100201	100301	
ARCAM	100201		
ARDEM	033331	101131	
ARISTONA	000111	033131	033331
	101021	101131	
ART TECH	000111		
ARTHUR-MARTIN	010311		
ASA	012321	020211	020221
	021031	100011	
ASBERG	000111	012331	021311
	033331	100021	101131
ASORA	001321		
ASTRA	001321	033331	101131
ATLANTIC	000111	023321	033331
	101131		
ATORI	001321		
ATORO	001321		
AUCHAN	010311		
AUDIOSONIC	000111	001321	033331
	100031	100131	101131
AUDIOTON	001321		
AUDIOVOX	000111		
AUTOVOX	023311	023321	033201
	100011	101111	

AWA	000231	001321	033311
	033321	033331	100131
	101131		
BAIRD	100031	100121	101201
BANG & OLUFSEN	032101	100011	
BASIC LINE	000111	000121	001321
	033331	100131	101131
BAUR	000111	001021	001321
	002211	002221	002231
	002301	002331	010331
	020001	020011	020021
	033331	100311	101001
	101031	101111	101121
	101131		
BEC	000111		
BECRESE	000111	032331	
BEKO	000111	020201	022021
	022111	030221	033331
	101131		
BELL & HOWELL	000111		
BENCHMARK-BEAMARK	032331	000111	001321
BEON	000111	021311	033331
	101131		
BESTAR	000111	011001	033331
	100131	101131	
BESTAR-DAEWOO	100131		
BIGSTON	001321		
BLACK DIAMOND	101131		
BLACK PANTHER	100021		
BLAUPUNKT	013231	013301	013311
	013331	020001	020021
	020101	020121	032311
	033101	033111	101031
	101121		
BLAUPUNKLET	000111	033331	101131
BLUE SKY	000111		
BONDSTEC	033201		
BOSCH	033101		
BPL	033331	101131	
BRANDT	030131	100031	100101
	100111	100121	100201
	100221	100301	100331
BRANDT ELECTRONIQUE	023101	023211	
	030131	032221	100101
	100111	100301	
BRENDSTAR	001321		
BRINKMANN	021311	033331	101131
BRIONVEGA	000111	012021	033331
	100011	101131	
BRIORRYEGA	000111		
BROCKWOOD	032331		
BROKSONIC	032331		
BRUNS	100011		
BSR	003321	010231	
BUSH	000111	003321	011131
	022201	033321	033331
	100131	101111	101131
	032331		
CAMPLE	032331		
CANDLE	032331		
CAPEHART	000111	032331	
CARAD	033331	101131	
CARENA	033331	101131	
CARREFOUR	000111	033321	033331
	101131		
CARVER	000111		
CASCADE	033331	101131	
CASIO	033331	101111	101131
CATHAY	000111	033331	101131
CCE	033331	101131	
CENTURION	000111	033331	101131
CENTURY	031301	100011	101101
CGE	001321	010111	011131
	012331	021311	031301
	033121	100201	

CGM	001321		EDISON	100031		
CIE	001321		ELBE	010131	012021	013031
CIMLINE	001321			031211	033331	101031
CIRCUIT CITY	032331			101101	101131	
CITIZEN	000111	032331	ELBIT	000111		
CITY	001321		ELCIT	100011	100021	
CLARIVOX	022001	031211 033331	ELECS	000111		
	100021	101131	ELECTRATUNE	032331		
CLATRONIC	001321	012331 013121	ELECTRO TECH	001321		
	031231	031301 033331	ELECTROHOME	032331		
	100021	101131	ELEKTRONIKA	000111		
			ELEKTA	001321	033331	101131
COLORTYME	000111		ELEKTRONIKA	000111		
COMPUTRON	001321		ELG	033331	101131	
CONCORDE	001321		ELIN	000111	001321	033331
CONDOR	021311	001321 013121 033331 100021		101111	101131	
	101131		ELITE	000111	032331	033331
CONIC	000111	032331		101131		
CONRAD	033331	101131	ELMAN	030221	100021	
CONTEC	001321	033311 033321	ELTA	001321	011001	
	033331	101131	EMERSON	032331	033331	100011
				101131		
CONTINENTAL EDISON	030131	032221 023101 100301	ENERGY SISTEM	101221	101231	
	100201	100301	ERRES	000111	033131	033331
CORONADO	032331			101021	101131	
COSMEL	001321	033331 101131	ESC	033331	101131	
CRAIG	000111		ETRON	001321	011121	033331
CROSLEY	000111	010121 012331		101131		
	031301	100011	EUROMAN	033331	101131	
CROWN	000111	001321 012331	EUROMANN	000111		
	032331	033331 101131	EUROPA	033331	101131	
CRYSTAL	000111		EUROPHON	000111	031131	033331
CTC CLATRONIC	021311			100021	101131	
CURTIS MATHES	000111	032331	EXCEL	033331	101131	
DAEWOO	000111	001231 001301	EXPERT	010311	023321	030211
	001311	001321 022331	EXPERT (F)	010311	030211	
	032331	033331 100131	EXQUISIT	033331	101131	
	101131		FAMILY LIFE	033331	101131	
DAICHI	001321		FENNER	001321	100131	
DANSAI	032331	033321 033331	FERGUSON	021331	023201	023211
	101131			030001	030011	030021
DAWA	000111	033331 101131		030031	030221	030321
DAYTRON	001321	032331 033331		031111	031211	033331
	100131	101131		100031	100101	100111
DECCA	000111	021321 031121		100121	100221	100321
	032031	033331 101131		100331	101101	101131
DEITRON	033331	100131 101131		101201		
DENVER	001321	033331 101131	FIDELIS	001321		
DER	101201		FIDELITY	011101	033331	101131
DESMET	000111	001321 033331		101201		
	100011	101131	FILSAI	001321		
DIAMANT	033331	101131	FINLANDIA	012211	021031	100101
DIAMOND	001321			100121		
DIGILINE	033331	101131	FINLUX	000111	001321	003321
DIGITOR	033331	101131 101311		012301	012321	020211
DIK	033331	101131		020221	021001	021011
DIXI	000111	001321 033331		021021	021031	021121
	100011	101131		021201	021211	021311
	101111			023121	031121	033331
DORIC	101321	101331 102001		100011	100021	101131
DSE	102011	102021 102031	FIRST LINE	000111	001321	033331
	102101			100021	100131	101101
DTS	001321			101111	101131	
DUAL	000111	001321 012021	FISHER	001221	031321	032131
	013101	033211 033331		033321	100011	101111
	100121	100201 101111	FLINT	000111	033331	101131
	101131		FNR	100021		
DUMONT	021311	032331 100011	FORGESTONE	001201		
	100021		FORMENTI	000111	011021	033331
DUX	033331	101021 101131		100011	101131	
D-VISION	033331	101131	FORTRESS	032331	100011	
DYNAMIC	001321		FRABA	033331	101131	
DYNATECH	032331		FRIAC	033331	100021	101131
DYNATRON	033331	101021 101131	FRONTECH	001321	033001	101111

FUBA	022101		HEMMERMANN	101111		
FUJITSU	010231	023321 032331	HIFIVOX	030131	032221	100031
	033331	100021 101131		100201	100301	
FUJITSU GENERAL	010231	012021 023321	HIGHLINE	033331	101131	
FUNAI	001321	032331	HILINE	001321		
FUTURE	033331	101131	HINARI	000111	001321	011121
GALAXI	033331	100021 101131		032201	033321	033331
GALAXIS	013121	021311 033331		101131		
	100021	101131	HIT	100011		
GALAXY	013121	021311	HITACHI	000111	003331	010021
GALERIA	001321			010031	010321	010331
GBC	001321	010121 010201		011301	012031	012211
GE	031201	100131		021121	023031	030131
	100031	100101 100111		032331	033301	033321
	100121	100321		033331	100001	100031
GEANT CASIONO	010311			100121	101111	101131
GEC	010021	033331 100001	HMV	100011		
	101111	101131	HORIZONT	000111		
GELOSO	001321	031301 100131	HORNYPHON	000111		
GEM SOUND	001321		HORNYPHONE	033331	101021	101131
GENERAL	001321	100031 100101	HUANYU	100131		
	100221		HUSPI ELEKTRONIK	021311		
GENERAL ELECTRIC	100101	100121	HYPER	001321	033201	
GENERAL TECHNIC	001321		HYPSON	000111	001321	033331
GENEXXA	000111	033331 101131		101101	101131	
GITEM	000111		IBERIA	033331	101131	
GM	001321		ICE	000111	001321	033331
GMG	001321	021311		101131		
GOLDHAND	001321		ICOS	101021		
GOLDSTAR	000111	001321 003321	ICT	033331	101131	
	013011	013301 022031	IMA	032331		
	032331	033201 033331	IMPERIAL	000111	003311	010111
	100031	101131		011131	012331	013121
GOODMANS	000111	001321 022201		021311	031301	033331
	030031	032201 033321		101111	101131	
	033331	100111 100121	INDIANA	000111	033331	011131
	100131	100321 101131	INFINITY	000111		
GPM	001321		INGELEN	022021		
GRADIENTE	033331	101131	INGERSOLL	001321		
GRADIN	000111	001321	INNO HIT	000111	001321	013011
GRAETZ	010021	010211 011121		031131	033331	100021
	012211	033331 101131		101131		
GRANADA	000111	002101 010001	INNOHIT	000111	001321	013011
	011311	011331 021131	INNOVATION	033331	101131	
	030031	033011 033321	INTERACTIVE	033331	100011	100031
	033331	100111 100121		100301	101021	101131
	100321	101021 101131	INTERBUY	001321	033331	101131
GRANDIN	010311	030211 033331	INTERDISCOUNT	000111		
	100131	101131	INTERFUNK	000111	010021	010221
GRENADIER	001321			011121	011221	013121
GRONIC	100021			021311	031331	032001
GRUNDIG	002011	013211 013221		033101	033111	033131
	013231	013301 013311		033331	100011	100031
	013321	013331 020001		100301	101021	101111
	020021	020031 020101		101131		
	020111	020121 020131	INTERNAL	033331	100131	101131
	033321	033331 101031	INTERVISION	011001	033331	100021
	101121	101131		101131		
GTT	001321	021311	IRRADIO	000111	001321	012301
HALLMARK	032331			013011	033201	033331
HANSEATIC	000111	001321 013101		101131		
	033331	100011 101111	IST	000111		
	101131		ISUKAI	000111	033331	101131
HANTAREX	000111	001321 031201	ITL	001321		
	033331	100021 101131	ITS	001321	033331	101131
	033331	101131	ITT	010201	011231	101111
HANTOR	032331	100001		101201		
HARLEY DAVIDSON	032331		ITT NOKIA	101111		
HARRAD	032331		ITV	033331	100131	101131
HARVARD	032331		JBL	000111		
HARWOOD	033331	101131	JEAN	033321		
HAUPPAUGE	033331	101131	JETPOINT	000111		
HCM	001321	033331 101131	JINLIPI	001321		
HEATHKIT	000111		JMB	033331	100131	101131
HEDZON	033331	101131				

JOCEL	000201	000211	001111	LUXOR	003331	010031	010221
	001121	001131	002021		010321	010331	011011
JULIBEE	101131				011221	012031	012101
JUMBOTRONIC	000111				012121	012131	012201
JVC	000111	003011	003021		012211	013011	020211
	003031	003101	003111		021001	021031	021121
	003121	003131	033321		021201	101111	
	101201			LUXOR SALORA	030201		
KAISER	000111			LUXOR/SKANTIC	012031		
KAISUI	000111	001321	033331	LXI	000111		
	101131			M ELECTRONIC	001321	021121	
KAPSCH	010021	023321		M ELECTRONICS	000111	001321	021031
KARCHER	000111	001321	033331		030221		
	100021	101131		MACYS	032331		
KATHREIN	033331	101131		MADISON	033331	101131	
KENDO	000111	001321	010131	MAGNADYNE	000111	001321	010121
	012021	023321	033331		021311	031131	031231
	100021	101131			031301	100011	100021
KENNEDY	012021	023321		MAGNAFON	031131	100021	
KENWOOD	032331			MAGNASONIC	000111	001321	032331
KIOTA	001321			MAGNAVOX	000111	033321	033331
KITION	101131				101131		
KITON	033331			MAGNUM	001011	033331	101131
KLH	032331			MANESTH	000111	033331	101131
KNEISSEL	013101	033331	100131	MANHATTAN	033331	101131	
	101101	101131		MARANTZ	000111	033331	101131
KOBIC	001321			MARELLI	100011		
KOLSTER	000111	033331	100021	MARK	000111	033331	100131
	101111	101131			101131		
KONICHI	001321			MASUDA	033331	101131	
KÖNIG	030121			MATSUI	000111	001321	001331
KONKA	033331	101131			002011	003311	013301
KORPEL	000111	033331	101131		022311	033311	033321
KORTING	031311	032001	100011		033331	100111	101031
KÖRTING	031311	032001			101111	101131	
KOSMOS	033331	101131		MAVA	032331		
KRAKING	101101			MAXAM	001321		
KRIESLER	101021			MAXELL	001321		
KTV	032331			MCE	001321		
KUASHO	000111	032331		MCMICHAEL	100001		
KUBA	101111			MEDIATOR	000111	033131	033331
KUBA ELECTRONIC	101111				101021	101131	
LEADER	001321			MEDION	001101	033331	101131
LECSON	033331	101131		MELECTRONIC	020311	021221	033331
LEGEND	001321				100031	100101	100121
LENCO	000111	001321	002001		100131	101031	101111
	033331	100131	101131		101131		
LENOIR	001321			MEMOREX	001321		
LEVIS AUSTRIA	033331	101131		MEMPHIS	001321		
LEYCO	000111	033331	101131	MERCURY	001321	033331	101131
LG	033331	100031	101131	METZ	013131	013201	013301
	102111	102121	102131		020001	020021	020111
	102201				031331	032021	033331
LIESENK & TTER	033331	101131			100011	101031	101121
LIESENKÖTTER	000111	033331	101021		101131		
	101131			MGA	033331	101131	
LIESENKÖTTER	000111	033101		MICROMAXX	033331	101131	
LIFE	001321			MIDLAND	032331		
LIFETEC	001321	033331	100131	MINATO	033331	101131	
	101131			MINERVA	013301	020021	101031
LINITRON	032331				101121		
LLOYD	032331			MINOKA	000111	033331	101131
LLOYD'S	001321			MISTRAL ELECTRONIC	101201		
LOEWE	000111	032011	033331	MITSUBISHI	000111	001321	032121
	100011	101131			032131	033011	033021
LOGIK	033311	033331	101131		033231	033321	033331
	101201				100011	101131	101201
LÖGIK	001211	032231		MIVAR	012311	013001	013011
LUMA	000111	001321	010201		013031	013101	022011
	012021	023321	033331		031201	031221	
	100131	101131		MORGAN'S	033331	101131	
LUMATRON	033331	101131		MOTOROLA	000111		
LUX MAY	000111	033331	101131	MTC	032331	101111	

MULTIBROADCAST	101201			ONWA	100021		
MULTISTANDARD	100021			OPERA	000111	033331	101131
MULTITEC	033331	101131		ORBIT	000111	033331	101131
MULTITECH	000111	001321	012331	ORIENT	001321		
	032331	033331	100021	ORION	000111	000301	000311
	101111	101131			000321	000331	001321
MUSIKLAND	033331	101131			012001	012011	031031
MYRYAD	033331	101131			032331	033311	033331
NAIKO	033331	101131			100021	101131	
NAKIMURA	033331	100131	101131	ORLINE	033331	101131	
NAMSUNC	001321			ORMOND	033331	101131	
NAONIS	010201			OSAKI	033331	100131	101131
NATIONAL	000111	002031		OSIO	033331	101131	
NEC	001321	033311	033321	OSUME	033321	033331	101131
	033331	100131	101131	OTF	001321		
NECKERMANN	000111	001321	002231	OTTO VERSAND	000111	001321	002211
	002301	003021	010331		002221	002231	002301
	011301	012021	013121		002311	003321	010331
	013301	013321	020001		011001	013321	013331
	020021	020111	031131		020001	020111	030221
	033101	033111	033331	OTTO-VERSAND	000111	001321	002301
	100011	100311	101001		002331	003201	011001
	101031	101111	101121		013301	013321	020021
	101131				022031	030221	031031
NEI	000111	022301	033331		032311		
	10131			PACIFIC	000211	000221	033331
NETSAT	033331	101131			101131		
NEUFUNK	033331	101131		PAEL	012301		
NEUTECH	000111	001321	033331	PALLADIUM	000111	020001	033331
	100121	101131			100011	100311	101001
NIKKAI	000111	032331	033321		101031	101111	101121
	033331	101131			101131		
	032311	033201	033211	PALSONIC	033331	101131	
	033321	033331	100031	PANAMA	001321	033331	101131
	100121	100311	101001	PANASHIBA	001321		
	101031	101111	101121	PANASONIC	000111	002031	002101
	101131				002111	002121	002131
NIKKO	022231				013131	032301	032311
NOBLEX	001221	001321			033331	101131	
NOBLIKO	012301	012331	100021	PANAVISION	033331	101131	
NOGAMATIC	030131	032221	100031	PANAVOX	001321		
	100201	100301		PANORAMA	001321		
NOKIA	001201	001321	003331	PATHE CINEMA	013101	101101	101111
	010021	010031	010201	PATHE MARCONI	030131	032221	100031
	010211	010221	011011		100201	100301	
	011031	011121	011221	PAUSA	001321		
	011311	012031	012101	PCE/PEC	032331		
	012201	012211	020231	PENNEY	032331		
	020301	020321	020331	PERDIO	033331	101131	
	021101	021121	021131	PERFEKT	000111	033331	101131
	021201	021221	021311	PHILCO	000111	001321	010111
	023121	100031	100131		010121	012331	013121
	101111				021311	031301	033331
NOKIA AKAI	011111				100011	101131	
NONAME	000111			PHILEX	101201		
NORDMENDE	023031	023111	023211	PHILIPS	033331	100001	100011
	023221	023231	030001		100121	100131	100211
	030101	030131	030221		101021	101031	101101
	030311	032221	033331		101121	101131	101201
	100031	100101	100111		101211		
	100121	100201	100221	PHILIPS (F)	000111	033131	
	100301	100321	101131	PHOENIX	000111	033331	100011
NORMEREL	033331	101131			101131		
NOVABEAM	000111			PHONOLA	000111	033131	033331
NOVAK	101021				100011	101021	101131
NOVATRONIC	000111	001321	033331		101201		
	100131	101131		PILOT	033331	101131	
	001321			PIONEER	000111	010301	023031
O GENERAL	010311	011011	012031		033331	100031	100101
OCEANIC	012211	021121	021201		100121	100211	101131
	030211			PLANTRON	000111	001321	033331
	001321	033331	101131		101131		
OKANO	001321			POLICOM	100011	100021	100031
OLYMPIC	001321				100301	101101	
ONCEAS	001321						

POPPY 001321
PORTLAND 032331 100131
PRANDONI PRINCE 010201 012301
PRANDONI-PRINCE 031131
PRIMA 000111 001321 032331
PRINCESS 001321
PRINZ 101111
PROELCO 000111
PROFEX 001321 011001 012331
PROFITRONIC 000111 033331 100021
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PROLINE 033331 100331 101021
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PROSONIC 033331 100131 101131
PROTEC 000111 001321
PROTECH 033331 100021 101111
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PROTON 001321 032331
PROVISION 033331 101131
PULSER 000111 001321 032331
PYE 000111 033331 100011
100131 101021 101111
101121 101131
PYMI 001321
QUELLE 000111 001321 002211
002221 002231 002301
002311 002331 003021
003321 011131 012021
012031 012301 012321
013011 013301 013331
020001 020021 020111
020211 020221 021011
021031 021201 022121
022131 023321 032131
032311 032331 033101
033111 033121 033201
033311 033321 033331
100031 100301 100311
101001 101031 101111
101121 101131
QUESTA 033321
R LINE 000111 033331 101131
RADIALVA 033331 100031 100101
101131
RADIO SHACK 032331 033331 101131
RADIOLA 000111 033131 033331
101021 101131
RADIOMARELLI 031131 033331 100011
101131
RADIOSTONE 101131
RADIOTONE 000111 001321 033331
RANK ARENA 033321
RANK/BUSH/MURPHY 013021
RCA 100111 100121 100321
100331
RECOR 033331 101131
RECORD 000111
RECTILIGNE 033331 101131
REDIFFUSION 033321
REDSTAR 033331 101131
REFLEX 033331 101131
REGENTE 001321
REVOX 000111 033331 101131
REVOX/STUDER 000111
REX 010131 010231 012021
013101 023321 031301
013101 013111 033331
RFT 100011 101131
033331 101131
RICOH 033331
RMB 032331
ROADSTAR 001321 033331 101131
ROBOTRON 100011
RODEX 033331 101131
ROSITA 001321

ROWA 001321
ROYAL 001321
ROYAL LUX 100111
RUKOPIR 033331 101131
SABA 010021 011121 012221
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023211 030131 030221
030231 030301 031131
032211 032221 100011
100031 100101 100111
100121 100201 100221
100301 100321 100331
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SACCS 000111 033311
SAISHO 033331 101131
SAIVOD 001321
SAKURA 003331 010001 010221
SALORA 010331 011011 011301
012031 012101 012201
012211 013011 020231
021031 021111 021121
021201 021221 023121
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SALSA 100111
SAMBERS 012301 012331 013011
031131 100021
SAMPO 032331
SAMSUNG 000111 001001 001021
001221 001321 013011
022121 023331 033001
033331 101131
SAMSUX 032331
SANELA 101101
SANKY 032331
SANSUI 000111 001321 032331
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SANYO 001321 013101 022131
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033331 101131
033331 101131
SAVE 033331 101131
SBR 000111 033131 033331
100001 101021 101131
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SCHAUB LORENZ 012031 012211 100131
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SCHNEIDER 000111 001001 001011
001321 011121 011321
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SCHNEIDER (F) 033131
SCOTT 032331
SEG 001321 002331 012331
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100311 101001 101111
101131
SEI-SINUDYNE 000111 010121 033331
100011 100021 100311
101001 101131
010101 010131 010201
010231 012021 012111
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023301 023311 023321
030201 032131 033321
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SEMUA 001321
SENCORA 011121 101111
SENTRA 003201 003211 003221
SHARP 003231 003301 032131
032331 033321 101201
101301

SHINTOSHI 033331 101131
SHIVAKI 000111 033331 100131
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SHOW 001321
SIAREM 010121 031201 100011
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SICATEL 013121 021231
SICATEL-FRANCE-S 021231
SIEMENS 000111 013301 013311
013321 013331 020001
020011 020021 020111
032111 032331 033101
033111 033331 101031
101121 101131
033331 101021 101131
000111 033131
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SIERRA 001321 033331 101131
SIILMA 033321 033331 101131
SILVA 000111 001321 011321
SILVER 030211 031231 031301
SINGER 033331 100011 100021
100111 101131
000111 002331 010201
011321 012021 031031
033331 100011 100021
100311 101001 101111
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SKY 033331 101131
SMARAGD 002011
SNYDER 000111
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SOLAVOX 033331 101131
SONIKO 033331 101131
SONNECLAIR 000111 001321 033331
SONOKO 101131
SONOLOR 010311 011011 012031
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SOUND & VISION 033331 100021 100131
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SOUNDESIGN 032331
SOUNDMASTER 001321
SOUNDWAVE 033331 101131
SPECTRICIAN 000111 032331
STANDARD 001321 033331 100131
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STARLITE 001321 033331 101131
STARLUX 001321
STERN 010131 010231 012021
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STRATO 033331 101131
SUNIC LINE 033331 101131
SUNKAI 033331 101131
SUNSTAR 001321 033331 101131
SUNWOOD 000111 001321 033331
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001321 011131 033331
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SUPERTEC 001321
SUPERTECH 001321 011131 033331
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SUPREMACY 032331
SUSUMU 100101 100111
SUTRON 001321
SYC LINE 001321
SYLVANIA 000111
SYMPHONIC 032331
SYSLINE 033331 101131
TANDBERG 012021 013131 100031
TASHIKO 032201 033321 100001

TATUNG 000111 001031 033311
033331 101131
033331 101111 101131
TEAC 001321
TEAK 001321 010231 011131
TEC 012021 022301 033331
100111 100221 101131
033331 101131
TECH LINE 000111 002031
TECHNICAL 000111
TECHNISAT 023011 033331 101131
TECHNOL 001321
TECNISON 001321
TEDELEX 001321 033331 101131
TEKNANT 000111 001321
TEKNIKA 032331
TEKON 001321
TELEAVIA 030131 031101 032221
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100201 100231 100301
033331 101131
TELECOR 033331
TELEFAC 001321
TELEFUNKEN 022221 023211 023331
030031 030101 030111
030221 030301 031011
033031 033121 033331
100031 100101 100111
100121 100201 100221
100301 100331 101131
033331 101131
TELEFUSION 033331 101131
TELEGAZI 033331
TELEMEISTER 033331 101131
TELEOPTA 001321
TELESONIC 033331 101131
TELESTAR 001321 033331 101131
TELETECH 001321 033331 101131
TELETON 010231 023321 033321
101111
TELEVIEW 033331 101131
TELEVISIO 030211
TELEXA 100021
TEMPEST 001321 033331 101131
TENNESSEE 033331 101131
TENSAT 000111 001321 003321
022031 033331 100131
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TENSION 001321
TESLA 000111
TESLA ORAVA 000111
TEVION 033331 101131
TEXT 100131
THOMAS 000111 001321 032331
THOMSON 033331 100031 100101
100111 100121 100201
100221 100231 100301
100321 100331 101111
101131
THORN 000101 000111 001211
010221 011121 011301
012301 021331 030111
031111 031211 032131
032231 033011 033131
033331 100031 100111
100121 100131 100311
101001 101101 101131
101201
THORN-FERGUSON 000111 001211 012021
021331 030221 031111
031211 032231 100031
100111 101101 101201
TOBO 001321
TOKAI 000111 033331 100131
101131

TOSHIBA	000001	000011	000021	WORLDVIEW	000111	001321	
	000031	000101	013021	XRYPTON	033331	101131	
	033321	100021	100031	YAMISHI	033331	101131	
	100231	101031		YOKAN	033331	101131	
TOSONIC	032331			YOKO	000111	001321	031301
TOTEVISION	032331				033331	101131	
TOWADA	100021	101111		YORK	000111		
TRANS CONTINENS	033331	101131		ZANUSSI	010201	023321	
TRANSONIC	033331	101131		ZENITH	000111		
TREVI	001321						
TRIAD	000111	033331	101131				
TRILUX	000111						
TRISTAR	101201						
TRIUMPH	033331	101131					
TRIVISION	001321						
TVTEXT 95	101131						
UHER	000111	002321	023321				
	033331	100131	101131				
ULTRAFOX	031301						
ULTRAVOX	010121	031231	031301				
	033331	100011	100021				
	100131	101131					
UMA	000111						
UNIC LINE	033331	101111	101131				
UNIMOR	000111						
UNITED	033331	101131					
UNIVERSUM	000111	001321	020001				
	020311	021031	021221				
	022201	023321	033101				
	033311	033321	033331				
	100031	100301	100311				
	101001	101111	101121				
	101131						
UNIVOX	033331	100011	101101				
	101131						
URANYA	001321						
VANGUARD	001321						
VECO	001321						
VESTEL	000111	000121	000131				
	022201	033331	101131				
	000111	001321	033331				
VEXA	101131						
VIDEO SYSTEM	000111	033331	101131				
VIDEOTECHNIC	100131						
VIDEOTON	003331	010011	012001				
	021311	023031	031001				
	031101						
VIDIKRON	100021						
VIDION	001321						
VIDTECH	033321						
VISION	001321	033331	101131				
VISON	000111						
VORTEC	000111	033331	101131				
VOXSON	000111	010201	033331				
	100011	101131					
WALTHAM	003331	012001	012231				
	031101	033331	100031				
	100101	100231	101131				
WARDS	000111						
WATSON	000111	001321	033331				
	101131						
WATT RADIO	010121	021311	100021				
	101111						
WEGA	031321	033321	033331				
	100011	101131					
WEGAVOX	000111	001321	021311				
	033331	101131					
WELTBlick	000111	033331	101131				
WESTON	033331	101131					
WHARFEDALE	033331	101131					
WHITE WESTINGHOUSE	000111	021311	033331				
	101131						
WINSTON	000111	001321					
WINTERNITZ	001321						

PANASONIC	002313	021313		FREEVIEW	030133	030203	030213
PANSAT	000123				030233	030303	030313
PHILIPS	000233	001013	001023		030323	031003	031023
	001033	003103	010233		031033	031103	031123
	010303	010313	011003		031233	031303	031323
	011103	011113	011123		032013		
	021233	021303	030023		030123		
PROSAT	001003			GERICON	030203	030323	
SAGEM	001203	011303	012333	GOODMANS	030303		
	020233	022003		GRUNDIG	030233		
SAMSUNG	003133	012323		HAUPPAUGE	030323		
SATELLITE	003113			HITACHI	030323		
SECTOR	001213			HUMAX	031123		
SEDEA	000203			JVC	030323		
SMARTBOX	023213			LABGEAR	030313		
SKY (SKY Digital)	002303	021313	021323	LIDCOM	030203		
	021333			LIFETEC	031113	032003	
SKY ITALY	022133			MARMITEK OCTOPUS	031133		
SKY MASTER	020123	020133	020333	MATSUI	030203	030323	032013
	021003	021033	021103	MEDION	031113	032003	
SKY SATELLITE	020203	020323	021123	MICROMAXX	031113	032003	
	021133			MICROSTAR	031113	032003	
SKY+ (SKY Digital +)	021223			NOKIA	031303	031313	
SKY (NZ)	020203	020323	021123	OPTEX	031203		
	021133	030033		ON-DIGITAL	030333	031313	031333
SONY	021313			PACE	030213	030333	
STRONG	000133	013113	013123	PANASONIC	030113		
	013133	013203	013213	PHILIPS	031323		
	013223	013233	013303	PIONEER	031233	031333	
	013313	013323	013333	PREMIERE	031303	031323	
	020003	020013	020023	PRO2	031113	032003	
SUN/MOON/STAR	020033	020103	020113	REBOX	030223		
TANDBERG	002323			SAGEM	031103		
TEAC	000223			SCHWAIGER	031013		
TELE+	023113			SHARP	030103		
TELEVES	011033			SONY	030133		
	000003	000033	000103	TEVION	031113	032003	
	000113	001323	002333	THOMSON	031003		
	003013	003023	003123	TOP-UP TV	030333	031213	031313
	010003	010013	010123				
	010133	011023	012223				
	012233	020303	020313				
	021013	021023	021113				
	022213	022223	022233				
	022303	022313	022323				
THOMSON	013023	022003					
THORN-FERGUSON	000013						
TOPFIELD	023223	023233	023303				
TOSHIBA	020223						
TPS	002103	020313	022003				
	022013	022023					
TRIAD	013023						
VORTEC	000123						
WINTAL	023013						
WORLDSAT	003233	003303					
XSAT	002113	011333					
ZEHNDER	001103	002003					
ZENITH	021323						
ZINWEL	012303						

DVB-T Brands

Mode	Code
ALBA	030203 031023
BUSH	030203 031223
CYBERMAXX	031113 032003
CYTRON	031113 032003
DIGENIUS	032003
DIGIFUSION	031033
ECHOSTAR	031213